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10/743,345

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Peter Wiedemuth

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FISH & RICHARDSON PC
P.O. BOX 1022
MINNEAPOLIS, MN 55440-1022

EXAMINER

CAVALLARI, DANIEL J

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/743,345	Applicant(s) WIEDEMUTH ET AL.	
	Examiner DANIEL CAVALLARI	Art Unit 2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15-21, 24-33, 35-39 and 42-51 is/are rejected.
- 7) ☒ Claim(s) 14, 22, 23, 34, 40 and 41 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/23/2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The Examiner acknowledges the amendments submitted 2/11/2008. The amendments to claim(s) 1, 6, 14, 24, 26, 42, and 47 are accepted.

Applicant's arguments filed 2/11/2008 in regard to the drawings have been fully considered but they are not persuasive.

Applicant argues that "Fig. 1 shows that the current supply units 31, 33 provide power through line 32 and 34 to the plasma load." This is not the case. Figure 1 does not show provided power through lines 32 and 34 "to the plasma load". Figure 1 fails to show any particular load never mind "the plasma load" as positively recited in the body of claim 42. Claim 42 states "providing the output power of the current supply unit to a plasma load of a plasma gas discharge application." The applicant implies that the mere output wires "32" and "34" are sufficient disclosure for the claim. Although the wires disclose an output, they are insufficient for the specific connection claimed of "providing the output power of the current supply unit to a plasma load of a plasma gas discharge application." The applicant tries to claim a very specific application and connection to the power supply however, only a generic power supply is disclosed (Figure 1).

The previously made objection to claim 14 has been withdrawn in view of the amendments.

Applicant's arguments in regard to the 112 first paragraph rejection of claims 1 and 3-41, 44, & 45 see arguments pages 13-14, are persuasive. The 112 first paragraph rejection of claims 1 and 3-41, 44, & 45 are withdrawn.

Applicant's arguments in regard to the 112 first paragraph rejection of claims 42, 43, 46-51 are also persuasive. The 112 first paragraph rejection of claims 42, 43, 46-51 are withdrawn.

Claim Objections

Claims 6 and 26 are objected to because of the following informalities:

In regard to Claim 6

The phrase "wherein receptacle receives" is grammatically incorrect. Furthermore, there is a lack of antecedent basis for "the receptacle" (if this was implied, noting it is unclear). The claims recite "a control receptacle" therefore claim 6 will be taken to read as "a control receptacle".

Claim 26 states "the receptacle" whereas claim 24 recites "the control receptacle." Claim 26 will be read as "the control receptacle." The terminology should be changed to be consistent throughout the claims so it is clear what is being referenced.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,4, 6-10, & 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Farrant (US 6,211,581).

In regard to Claim 1

A current supply unit comprising:

A plurality of current supply modules (read on by the outlet and USB connection (60) pair (See Figure 21), having an input terminal (read on by the male plug of 21, Figure 21), and an output terminal (read on by female outlets of 10), and a control receptacle USB port, 60), the current supply modules connected such that each current supply unit having has a maximum output power that is greater than the maximum output power of its individual current supply modules (read on y the parallel connection);

a control unit (read on by computer, 71, 45, 29, Figure 21) connected to one of the control receptacles and movable to any of the control receptacles (60) of the other current supply modules of the current supply unit (via cord 29 and USB port 60); and

a data connection (USB bus) for connecting all the current supply modules of the current supply unit to the control unit such that the control unit is able to control all of the current supply modules of the current supply unit through connection to any one control receptacle of the current supply modules of the current supply unit (See Column 4, Line 60 to Column 5, Line 43 & Column 6, Lines 36-46).

The recitation that the current supply system is “for a plasma discharge application” has not been given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and

the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. *Kropa v Robie*, 88 USPQ 478 (CCPA 1951).

Furthermore, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

In regard to Claim 4

- Wherein the maximum output power of all the current supply modules is substantially the same (See Figure 21).

In regard to Claim 6

- The current supply system of claim 1, wherein a control receptacle (60, figure 21) receives the control unit (computer) and wherein exactly one current supply module of each current supply unit receives the control unit (via USB bus).

In regard to Claims 7, 8, 9, and 10

- The current supply system of claim 6, wherein the current supply module that receives the control unit is adaptive for connection to an external controller (computer, figure 21).

In regard to Claim 16

- Wherein the current supply modules are current sources (As they are a source of current, Figure 21).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3, 11-13, 17-21, 24-33, 36-39, 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farrant in view of Fujii et al. (hereinafter referred to as Fujii) (US 5,616,968).

In regard to Claim 3

Farrant fails to teach the wherein the current supply modules are power converters.

Fujii teaches a current supply system wherein each outlet comprises a power converter. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the power converter taught by Fujii associated with each outlet into the device of Farrant. the motivation would have been to provide a backup power supply (battery) and converter to each outlet of Farrant as taught by Fujii in order to provide power to critical devices in the event of a power outage.

Fujii further teaches:

In regard to Claim 11

The current supply system of claim 1, wherein each current supply module includes a measuring device (read on by control unit 15 Figure 2) for measuring a current supply module output quantity.

In regard to Claims 11-13

In regard to Claim 11

- The current supply system of claim 1, wherein each current supply module includes a measuring device (37, Figure 9) for measuring a current supply module output quantity.

In regard to Claim 12

- Wherein the output quantity is selected from the group consisting of a voltage, a current, and a power (read on by voltage, see figure 9)

In regard to Claim 13

- The current supply system of claim 11, wherein each measuring device includes a measuring component (39, figure 9 & 10, figure 1b) for measuring (via 39, figure 9) an analog output quantity (voltage) and converting the analog output quantity into a voltage (via charger, 10, figure 1b), a signal matching circuit (13, figure 1b) for converting the voltage from the respective measuring component, a voltage/current converter (14, figure 1b) for converting the output voltage of the

signal matching circuit into a current (current and voltage), and a resistor (38, figure 9) for generating a voltage drop.

In regard to Claim 17

- The current supply system of claim 1, further comprising an interlock circuit for the current supply unit, wherein the interlock circuit is adapted for connection to the current supply modules of the current supply unit (See Column 5, Line 44 to Column 6, Line 2).

In regard to Claim 18

- The current supply system of claim 1, further comprising: an output electrical conductor (18, figure 1b) for electrically connecting the current supply modules of the current supply unit at an output side wherein the output electrical connector electrically connects the output terminals (9) of two neighboring current supply modules.

In regard to Claim 19

- The current supply system of claim 18, wherein two or more current supply modules of the current supply unit are electrically connected at an input side (via L1, figure 1b).

In regard to Claim 20

- The current supply system of claim 19, wherein all the current supply modules are electrically connected at the input side (via L1, figure 1b).

In regard to Claim 21

Fujii discloses an input conductor (L1) and an output conductor (18) (see figure 1b) and draws the two conductors identically but fails to disclose an "identical" construction. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the input and output conductors with identical structures (same material) since it has been held to be within general skill of a worker in the art to select known material on the basis of its suitability for the intended use. *In re Leshin*, 125 USPQ 416.

In regard to Claim 24

- See Claims 1 & 18 above.

In regard to Claim 25

- See Claim 5.

In regard to Claim 26

- See Claim 6.

In regard to Claim 27

- See Claim 7.

In regard to Claim 28

- See Claim 8.

In regard to Claim 29

- See Claim 9.

In regard to Claim 30

- See Claim 10.

In regard to Claim 31

- See Claim 11.

In regard to Claim 32

- See Claim 12.

In regard to Claim 33

- See Claim 13.

In regard to Claim 36

- See Claim 17.

In regard to Claims 37

- See Claim 19.

In regard to Claims 38 and 39

- See Claims 20 & 21.

In regard to Claims 44 & 45

- The current supply system of claim 18, wherein the output electrical conductor is a conductor rail (read on by conductor rail connected via 18, figure 1b).

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farrant.

Farrant teaches the use of a single current supply system (10, figure 21) and fails to explicitly teach wherein a plurality of first current supply systems (10) are electrically combined to form a first current supply unit having a first maximum power output and a plurality of second current supply systems are electrically combined to form a second current supply unit having a second maximum power output different from the first maximum power output.

However, plugging two units (10, figure 21) into one outlet (thereby reading on a first current supply system) and plugging three units (10, Figure 21) into a different outlet (thereby reading on a second current supply system) provides reads on a plurality of first current supply systems (10) are electrically combined to form a first current supply unit having a first maximum power output and a plurality of second current supply systems are electrically combined to form a second current supply unit having a second maximum power output different from the first maximum power output.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide for a plurality of power strips creating a first current supply system and providing another plurality of power strips creating a second current

supply system since it has been held that mere duplication of essential working parts of a device has no patentable significance unless a new unexpected result is produced. *In re Harza*, 124 USPQ 378. Furthermore, it has been held that a mere change in size of a component is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Claims 15 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farrant in view of Pereira (US 2004/0000815).

Farrant fails to disclose the switching unit being disposed in a switching cabinet.

Pereira teaches a current supply system (254, figure 2) disposed in a switching cabinet. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the switching rack with the current supply module taught by Farrant. The motivation would have been to provide a cabinet in which to easily install and access other equipment powered by the current supply system.

Claims 42, 46, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoller (US 5,828,356) in view of Farrant

Stoller teaches a plasma load of a plasma gas discharge application (read on by the plasma television, figure 1D). Stoller fails to teach how the plasma gas discharge application and other devices (see figure 1d) are powered.

Farrant teaches:

A plurality of current supply modules (read on by the outlet and USB connection (60) pair (See Figure 21), having an input terminal (read on by the male plug of 21, Figure 21), and an output terminal (read on by female outlets of 10), and a control receptacle USB port, 60), the current supply modules connected such that each current supply unit having has a maximum output power that is greater than the maximum output power of its individual current supply modules (read on y the parallel connection);

a control unit (read on by computer, 71, 45, 29, Figure 21) connected to one of the control receptacles and movable to any of the control receptacles (60) of the other current supply modules of the current supply unit (via cord 29 and USB port 60); and

a data connection (USB bus) for connecting all the current supply modules of the current supply unit to the control unit such that the control unit is able to control all of the current supply modules of the current supply unit through connection to any one control receptacle of the current supply modules of the current supply unit (See Column 4, Line 60 to Column 5, Line 43 & Column 6, Lines 36-46).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the current supply unit comprising the current supply modules taught by Farrant with the plasma gas discharge device of Stroller. The motivation would have been to provide a power strip capable of supplying power to the plurality of devices of Stroller (figure 1d) in a controllable manner.

Claims 43, 46, 48-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoller (US 5,828,356) in view of Farrant in further view of Fujii.

In regard to Claim 43

Incorporating all arguments above, Farrant fails to teach two modules with different outputs.

Fujii teaches a modular design capable of creating different maximum outputs (See figure 1a and figure 12).

Furthermore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a plurality of power strips creating a first current supply system and providing another power strips creating a second current supply system since it has been held that mere duplication of essential working parts of a device has no patentable significance unless a new unexpected result is produced. *In re Harza*, 124 USPQ 378. Furthermore, providing different sized power strips as taught by Fujii is not patentable since it has been held that a mere change in size of a component is generally recognized as being within the level of ordinary sill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the modular design and backup power supply system taught by Fujii into the current supply system of Farrant. The motivation would have been to supply power to attached devices when the AC is not available.

Farrant further teaches:

In regard to Claim 46

- The method of claim 42, further comprising inserting the control unit into only one of the current supply modules

Fujii further teaches:

In regard to Claim 48

- The current supply system of claim 1, further comprising: an output electrical conductor (18, figure 1b) for electrically connecting the current supply modules of the current supply unit at an output side wherein the output electrical connector electrically connects the output terminals (9) of two neighboring current supply modules.

In regard to Claim 49

- The current supply system of claim 18, wherein two or more current supply modules of the current supply unit are electrically connected at an input side (via L1, figure 1b).

In regard to Claim 50

- The method of claim 43, further comprising reconfiguring the established electrical connection between the multiple first current supply modules to for the first current supply unit having another first maximum power output that is different from the first maximum power output [accomplished by adding another module (3, figure 1a) onto the power strip].

In regard to Claim 51

- The method of claim 50, wherein reconfiguring comprises changing the electrical connection between the multiple first current supply modules [wherein the electrical connection is changed by making it bigger].

Allowable Subject Matter

Claims 14, 22, 23, 34, 40 and 41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 14 and 34 claim supplying the data signals of the measuring circuit to the control unit via the parallel data connection. Fujii teaches a series connected control units (via connections 16 & 17) through which the controllers send signals however there is a lack of motivation to combine the series connected controllers as taught by Fujii with the USB data connection which connects to all the modules so to be able to control all the current supply modules of the current supply unit.

Claims 22 and 40 claim wherein the input terminal includes a plurality of connectors that correspond to a number of phases of a power line connection, and the output terminal includes two connectors, which are disposed in different conductor planes, and through which the conductors may be connected to corresponding connectors of neighboring current supply modules, although taught by Meyer (US

4,992,925), there is no motivation to combine the plural phase system with the device of Farrant.

Claims 23 and 41 states the current supply system further comprising insulative distribution elements for connecting the conductors with the terminals, wherein the distribution elements each comprise receptacles for receiving ends of the conductors. Although taught by Meyer (US 4,992,925) (see buses, figure4) there is a lack of motivation to combine Meyer with the prior art of record.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Cavallari whose telephone number is 571-272-8541. The examiner can normally be reached on Monday-Friday 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on (571)272-2800 x36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael J Sherry/

Supervisory Patent Examiner, Art Unit 2836

April 22, 2008

/DJC/